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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/357,957	07/21/1999	RICHARD LEVY	01064.0011-0	9917

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EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/357,957	Applicant(s) LEVY, RICHARD	
	Examiner Cephia D. Toomer	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-32, 34-43, 48, 49, 53, 55-68 and 72-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39 and 40 is/are allowed.
- 6) ☒ Claim(s) 29-32, 34-38, 41-43, 48, 49, 53, 55, 56, 58, 60-62, 64, 66-68, 72-85, 93 and 95-97 is/are rejected.
- 7) ☒ Claim(s) 57, 59, 63, 65, 86-92 and 94 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the amendment filed January 18, 2006 in which claims 29, 31, 32, 36, 38, 61, 63, 65, 67, 68 and 83 were amended and claims 85-97 were added.

1.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 29, 30, 31, 68, 72-79, 83 and their dependents are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 29 and its dependents

The specification does not support the language "a lubricating metal and alloy thereof," "a particulate lubricating metal nitride" or "carbonate". The specification is very specific about the metal compounds, metals, carbonates and nitrides. Applicant is claiming generic components when the specification only teaches zinc, cadmium, antimony or lead oxide, boron nitride not in particulate form and lead carbonate. With

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respect to the metal compounds and alloys thereof, Applicant discloses babbit, bronze and brass, which are alloys, and about 15 metals. Nowhere in the specification is it taught that every alloy and every metal is within the scope of specification. Furthermore, the specification does not support generic "silicates".

Claims 30, 83 and their dependents

The specification does not support a **solid or particulate** inorganic lubricant containing an organic lubricant.

Claim 31

The specification does not support all metal materials that provide barrier-layer lubrication.

Claims 68 and 72-79

The specification does not support a composition that is substantially anhydrous.

Claims 85 and 96

The specification does not support particulate boron nitride.

Claim 95

The specification does not support a composition that is substantially anhydrous.

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Applicant argues that the original filed application supports all of the above limitations. The examiner respectfully disagrees. Applicant has taken a species or genus from the specification and broadly or narrowly claimed the respective genus of the species or a species of the genus. For instance, the specification teaches mica, asbestos and talc, which are all silicates. Applicant is now claiming all silicates. This is clearly not what was intended when applicant drafted the present specification. While applicant has support for solid inorganic lubricants, this language relates to an extremely large number of possible lubricants. In fact, the claims contain so many options or possible permutations and provisos that a lack of clarity and conciseness exist.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 29, 31, 32, 68, 72, 73, 85, 93 and 95-97 are rejected under 35 U.S.C. 102(b) as being anticipated by Takayama (5,792,717).

Takayama teaches a sliding material comprising a porous ceramic body that has open pores filled with a high water absorbing resin (see abstract). The ceramic body may be boron nitride and the resin may be crosslinked-polyacrylates (see col. 4, lines 4-11; col. 5, lines 16-28). The resin absorbs at least 100 times its weight in water (see col.

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4, lines 60-67). Takayama teaches that the composition has lubricity properties (see col. 4, lines 30-43).

Accordingly, Takayama teaching all the limitations of the claims anticipates the claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 29, 31, 34-38, 41, 42, 48, 49, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 5,275,760) in view of Obayashi (US 4,340,706).

Johnson teaches a gelled corrosion inhibitor comprising a gelling agent slurried in a first medium and a corrosion inhibitor dissolved in a second liquid medium, wherein the gelling agent forms a gel in the second liquid medium (see abstract; column 3, lines 3-7). The gelling agents are water insoluble hydrogel-forming materials known in the art as super absorbent polymers (see col. 3, lines 21-23, 31-68). The gelling agent is carried as a slurry in an oil such as fatty esters, mineral oils and lubricating oils (first medium). The corrosion inhibitor (lubricant additive) is dissolved in water (see col. 4, lines 39-55). The corrosion inhibitor may be an alkali or alkaline earth metal carbonate

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(applicant's carbonate) (see col. 4, lines 44-48). Johnson teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, Johnson differs from the claims in that he does not specifically teach applicant's intended use. However, intended use is given no patentable weight in claims that are directed to the composition per se.

In the second aspect, Johnson differs from the claims in that he does not specifically teach that the super absorbent polymer absorbs greater than 100 times its weight in water. However, Obayashi teaches this difference. Obayashi teaches that the cross-linked neutralized polyacrylic acid taught by Johnson absorbs at least 400-800 times its weight in water (see abstract; col. 6, lines 42-66).

It would have been obvious to one of ordinary skill in the art to have used the claimed polymers because Johnson teaches the use of super absorbent polymers and Obayashi teaches that these polymers absorb greater than 100 times their weight in water.

In the third aspect, Johnson differs from the claims in that he does not specifically teach that the oils are polymerized olefins. However, no unobviousness is seen in this difference because Johnson teaches that hydrocarbon oils may be used in the invention and this broad teaching encompasses polymerized olefins, which are hydrocarbon oils.

8. Claims 29, 31, 35, 53, 55, 56, 61, 68, 72, 85, 93 and 95-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martineu (US 4,977,192).

Martineu teaches a granular polymer composition having water absorption wherein the composition comprises a water-insoluble but swellable cross-linked polymer material formed of at least one polymer from at least one carboxylic group and at least one powdered mineral charge (lubricating additive) such as mica and talc and metal oxide (lubricating metal oxide) dispersed in and bonded to the polymer (see claim 1; col. 3, line 62 through col. 4, line 1; col. 4, lines 8-10). The mineral materials include dolomite (a carbonate) and iron oxide (non-noble metal chalcogenide) (see col. 4, lines 8-10). Additives such as dispersing agents may be included in the composition (see col. 4, lines 16-25). In Table IV, Martineu teaches that the polymers absorb from 100 to over 300% water. While these percentages for the amount of water absorbed are not the claimed 100 times its weight in water limitation, it would be reasonable to expect that the polymers of Martineu would meet this limitation because the polymers are prepared in the same manner as super absorbent polymers (see col. 4, lines 48-56), absent evidence to the contrary.

Martineu teaches the limitations of the claims other than applicant's intended use. However, intended use is given no patentable weight in claims that are directed to the composition per se.

Response to Arguments

Applicant argues that Takayama disclose a monolithic boron nitride ceramic whereas the present invention is directed to particulate boron nitride.

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The boron nitride disclosed in Takayama is in particulate form before he forms it into the ceramic body. Applicant's claims do not exclude forming a ceramic body from the particulate boron nitride.

Applicant argues that Johnson does not teach an inorganic lubricant or the silicate ester, polyphenyl ether, phosphate, biphenyl, phenanthrene, or phthalocyanine class of materials for lubricating a surface.

Johnson teaches that alkali or alkaline earth metal carbonates may be used in his invention. Applicant is broadly claiming a carbonate. Therefore, Johnson does teach the claimed inorganic lubricant. Applicant's lubricants are set forth in four groups, i.e., (1), (2), (3) or (4). Johnson teaches a carbonate and this compound would meet the limitations of group (1).

Applicant argues that Martineu fails to teach that the superabsorbent polymer absorbs greater than 100 times its weight in water.

Martineu appears to meet this limitation because the polymers are prepared in the same manner as super absorbent polymers (see col. 4, lines 48-56) and the skilled artisan would reasonable expect that the polymers would absorb greater than 100 times their weight in water, absent evidence to the contrary.

9. Claims 57, 59, 63, 65, 86-92 and 94 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claims 57 and 59 are objected to because the prior art fails to teach or suggest the lubricating composition comprising a SAP that absorbs greater than 100 times its weight in water and a chalcogenide of Mo, Sb, Nb or W.

Claim 63 and 65 are objected to because the prior art fails to teach or suggest a mixture of 3 or 4 components in combination with the SAP that absorbs greater than 100 times its weight in water.

Claims 86-92 are objected to because the prior art fails to teach or suggest the claimed lubricant materials

10. Claims 39 and 40 are allowable because the prior art fails to teach or suggest a lubricating composition comprising a SAP that absorbs greater than 100 times its weight in water and a phosphate.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cephia D. Toomer
Primary Examiner
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